



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q92644

Scott GAYNOR, et al.

Appln. No.: 10/579,341

Group Art Unit: Unknown

Confirmation No.: Unknown

Examiner: Unknown

Filed: May 15, 2006

For: CROSSLINKABLE ARYLAMINE COMPOUNDS AND CONJUGATED OLIGOMERS

OF POLYMERS BASED THEREON

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith, except for the following: U.S. patents and/or U.S. patent publications; and co-pending non-provisional U.S. applications filed after June 30, 2003.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

INFORMATION DISCLOSURE STATEMENT

U.S. Application. No.: 10/579,341

Attorney Docket No. Q92644

filing a request for continued examination (RCE) under §1.114, and therefore, no Statement

under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such

document constitutes prior art against the claims of the present application. Applicant does not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

Registration No. 58,490

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: August 4, 2006

2

Substitute for Form 144	Substitute for Form 1449 A & B/PTO			Complete if Known		
		Application Number	10/579,341			
INFORMATION DISCLOSURO (PE				Confirmation Number	Unknown	
ETAT	EMENT D	V A DDI IC	AAIT 4	Filing Date	May 15, 2006	
STATEMENT BY APPLICANT				First Named Inventor	Scott GAYNOR	
(use as many sheets as necessary) AUG 0 4 2006				rt Unit المير	Unknown	
			138	examiner Name	Unknown	
Sheet	1	of	2	Attorney Docket Number	Q92644	
		-	HABER			

U.S. PATENT DOCUMENTS							
Examiner Cite Initials* No.1	Cito	Document Nu		Publication Date			
		Number	Kind Code ² (if known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document		
		US 6,605,373	B2	08-12-2003	Woo et al.		
		US 6,362,310	Bl	03-26-2002	Woo et al.		
		US 6,255,449	B1	07-03-2001	Woo et al.		
		US 6,255,447	B1	07-03-2001	Woo et al.		
-		US 6,169,163	B1	01-02-2001	Woo et al.		
		US 5,962,631		10-05-1999	Woo et al.		
		US 5,728,801 '		03-17-1998	Wu et al.		
		US 5,777,070 ·		07-07-1998	Inbasekaran et al.		

			F	OREIGN PA	TENT DOCUME	NTS	
Examiner	Cite	For	eign Patent Docum	nent	Publication Date	Name of Patentee or	
	No.1	Country Code ³	Number ⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.					
		Norio MIYAURA et al., "Palladium-Catalyzed Cross-Coupling Reactions of Organoboron Compounds", Chemical Review, 1995, pages 2457-2483, vol. 95, American Chemical Society.					
		I. COLON et al., "High Molecular Weight Aromatic Polymers by Nickel Coupling of Aryl Polychlorides", Journal of Polymer Science: Part A: Polymer Chemistry Edition, 1990, pages 367-383, vol. 28, John Wiley & Sons, Inc.					
		Ismael Colon et al., "Coupling of Aryl Chlorides by Nickel and Reducing Metals", Journal of Organic Chemistry, 1986, pages 2627-2637, vol. 51, American Chemical Society.					
		Masahiko IYODA et al., "Homocoupling of Aryl Halides Using Nickel(II) Complex and Zinc in the Presence of Et ₄ NI. An Efficient Method for the Synthesis of Biaryls and Bipyridines", Bulletin of the Chemical Society of Japan, 1990, pages 80-87, vol. 63, No. 1, The Chemical Society of Japan.					
		Takakazu YAMAMOTO, "Electrically Conducting and Thermally Stable Π-Conjugated Poly(Arylene)S Prepared by Organometallic Processes", Progress in Polymer Science, 1992, pages 1153-1205, vol. 17, Pergamon Press Ltd.					
		Wayne R. SORENSON et al., "Preparative Methods of Polymer Chemistry", Second Edition, 1968, pages 1-504, Interscience Publishers.					
		P.E. BURROWS et al., "Metal ion dependent luminescence effects in metal tris-quinolate organic heterjunction light emitting devices", Applied Physics Letters, 1994, pages 2718-2720, vol. 64, No. 20, American Institute of Physics.					
		Yuji HAMADA et al., "High Luminance in Organic Electroluminescent Devices with Bis(10-hydroxybenzo[h]quinolinato)beryllium as an Emitter", Chemistry Letters, 1993, pages 905-906, The Chemical Society of Japan					

Examiner Signatur	. I		Date Considered	
Examine Signatur	c		Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

C. A. W. C. F 1440 A. S. P.W.TO	Complete if Known		
Substitute for Form 1449 A & B/PTO	Application Number	10/579,341	
INFORMATION DISCLOSURED PE	Confirmation Number	Unknown	
	Piling Date	May 15, 2006	
STATEMENT BY APPLICANT	First Named Inventor	Scott GAYNOR	
(use as many sheets as necessary) AUG U 4 100		Unknown	
\3	xaminer Name	Unknown	
Sheet 2 of 2	Attorney Docket Number	Q92644	

U.S. PATENT DOCUMENTS								
Examiner	Cite	Document N	umber Kind Code ²	Publication Date	Name of Patentee or Applicant of Cited Document			
Initials* No.1	Number	(if known)	MM-DD-YYYY	Name of Latence of Applicant of Cited Document				
•		US						

			F	OREIGN PA	TENT DOCUMI	ENTS	
Examiner	Cite	For	eign Patent Docu	ment	Publication Date	Name of Patentee or	
Initials* No.1	_	Country Code ³	Number ⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation ⁶

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.					
		Yuji HAMADA et al., "Organic Electroluminescent Devices with Bright Blue Emission", Optoelectronics- Devices and Technologies, 1992, pages 83-93, vol. 7, No. 1, MITA Press.					
		Junji KIDO et al., "Blue Electroluminescent 1,2,4-Triazole Derivative", Chemistry Letters, 1996, pages 47-48.					
	•	Masayoshi YOSHIDA et al., "Three-layered multicolor organic electroluminescent device", Applied Physics Letters, 1996, pages 734-736, vol. 69, No. 6, American Institute of Physics.					
		Xiao-Chang LI et al., "Synthesis and Optoelectronic Properties of Aromatic Oxadiazole Polymers", Journal of Chemical Society, Chemical Commun., 1995, pages 2211-2212.					
		Y. YANG et al., "Electron injection polymer for polymer light-emitting diodes", Journal of Applied Physics, 1995, pages 4807-4809, vol. 77, No. 9, American Institute of Physics.					
		Marko STRUKELJ et al., "Design and Application of Electron-Transporting Organic Materials", Science, 1995, pages 1969-1972, vol. 267.					
		Takakazu YAMAMOTO et al., "Polymer Light-Emitting Diodes with Single- and Double-Layer Structures Using Poly(2,3-diphenylquinoxaline-5,8-diyl)", Japan Journal of Applied Physics, 1994, pages L250-L253, vol. 33, Part 2, No. 2B.					
		D. O'Brien et al., "Electroluminescence applications of a poly(phenyl quinoxaline)", Synthetic Metals, 1996, pages 105-108, vol. 76, Elsevier Science S.A.					
		M.S. WEAVER et al., "Recent progress in polymers for electroluminescence: microcavity devices and electron transport polymers", Thin Solid Films, 1996, pages 39-47, vol. 273, Elsevier Science S.A.					

Examiner Signature		Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.